

**ABSTRACT OF THE DISCLOSURE**

Pulsed detonation engines (PDEs) are adapted for use in reaction control systems (RCS), such as thrusters for orbital correction and control (e.g., for earth-orbiting satellites), divert thrust generation and control for space-based interceptor devices, and for missile trajectory correction and motion control. According to one aspect of the invention, PDEs are adapted for motion control of so-called "kill vehicles," which are small devices, typically launched from satellites, for strategic missile defense.